

FIG. 1A

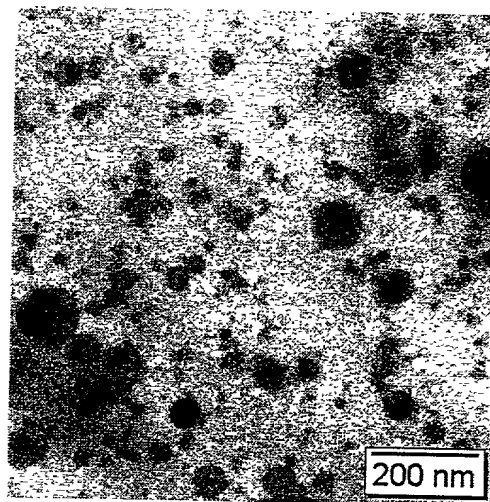


FIG. 1B

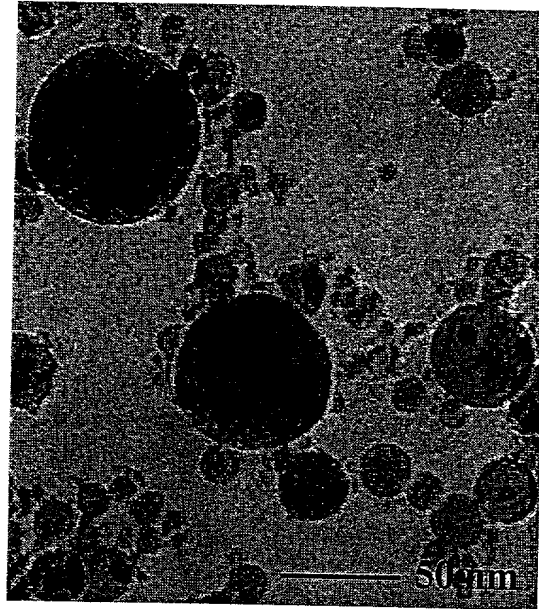


FIG. 2A

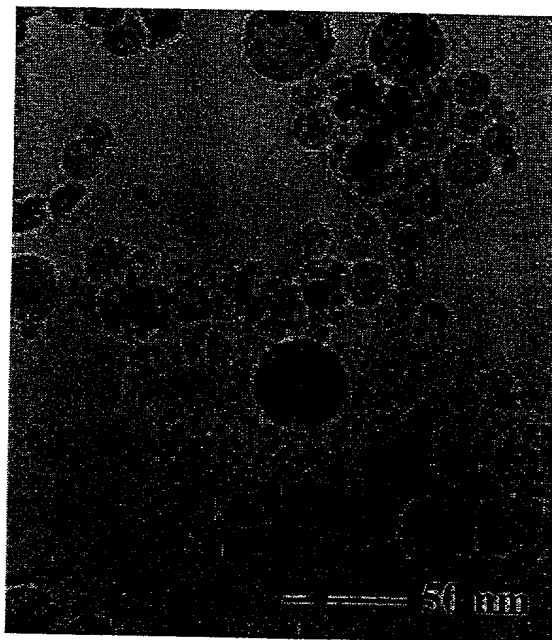


FIG. 2B

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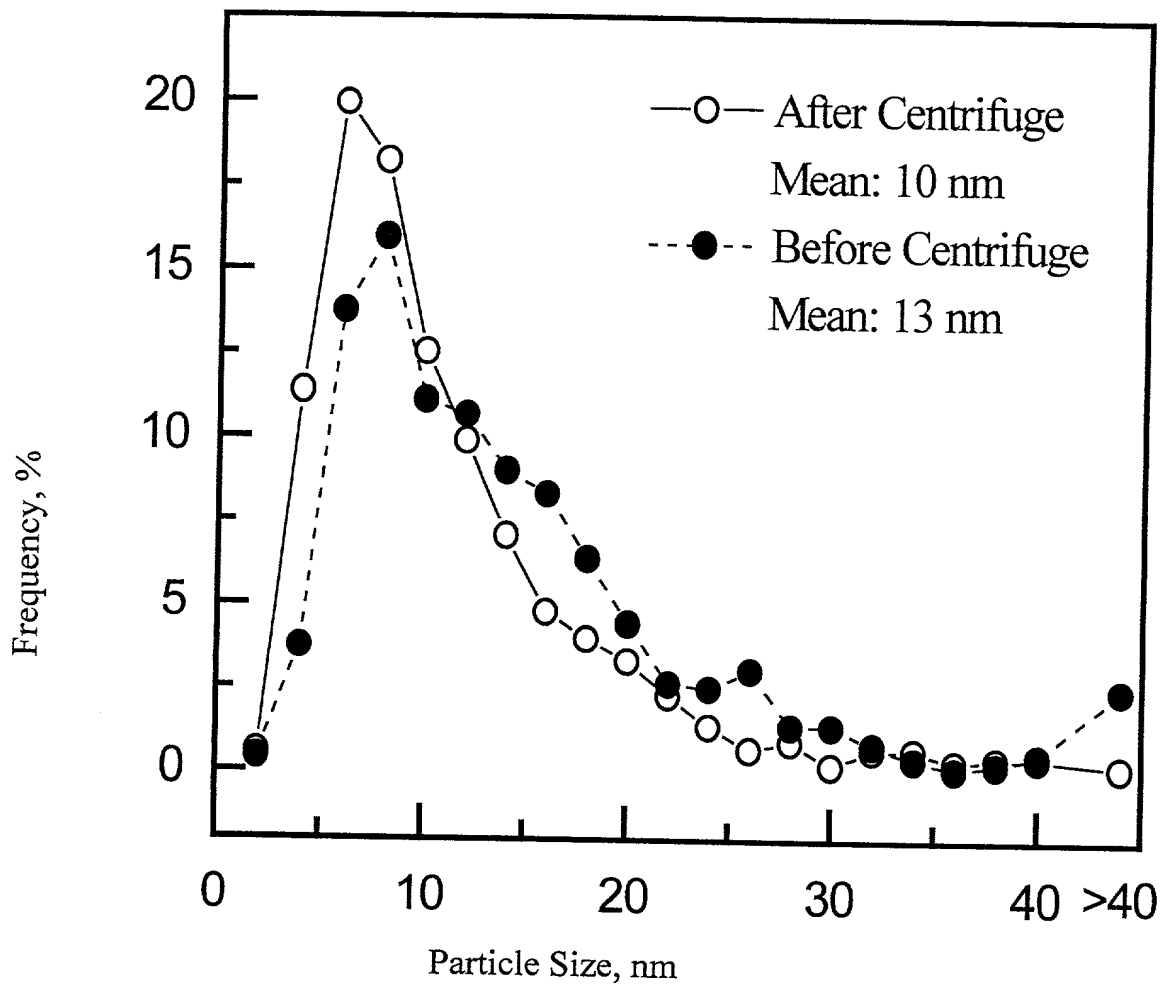


FIG. 2C

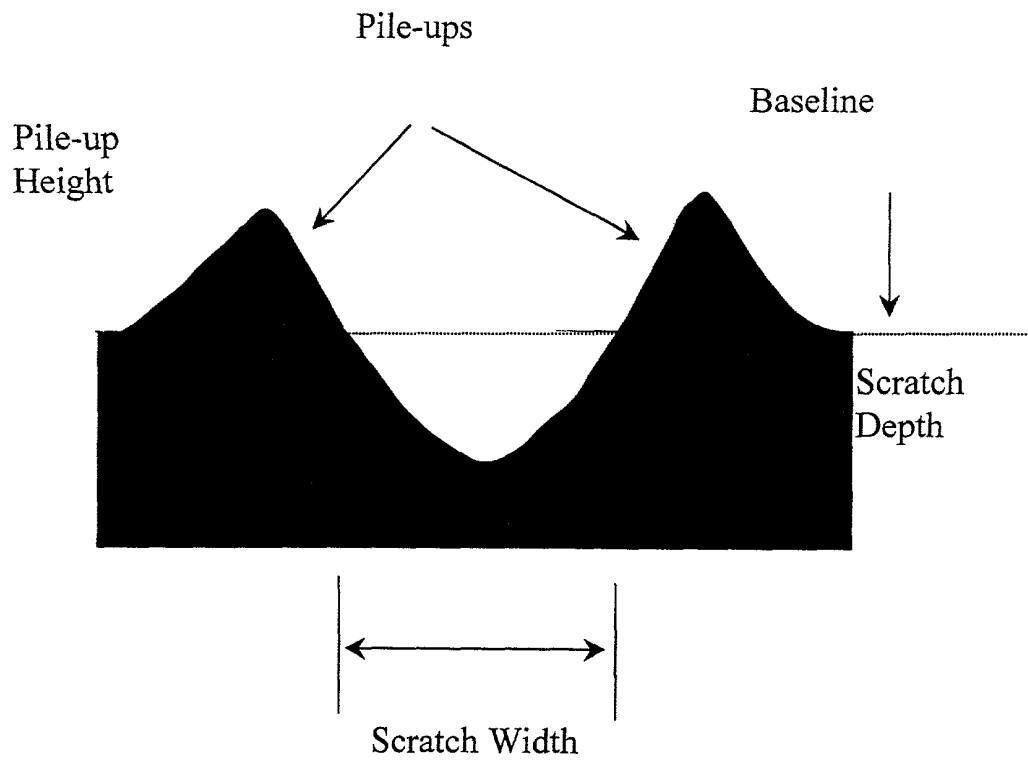


FIG. 3

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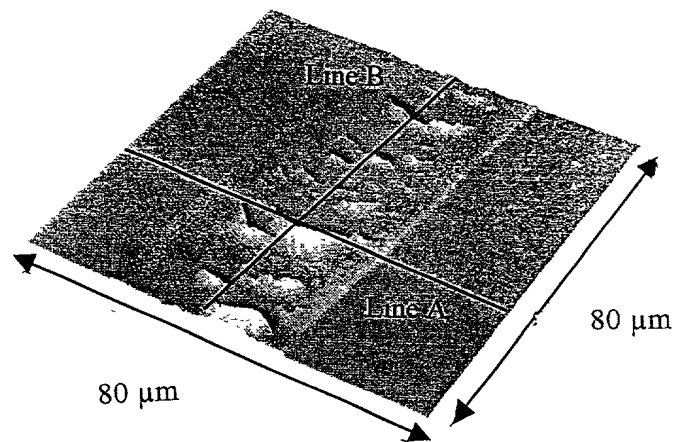
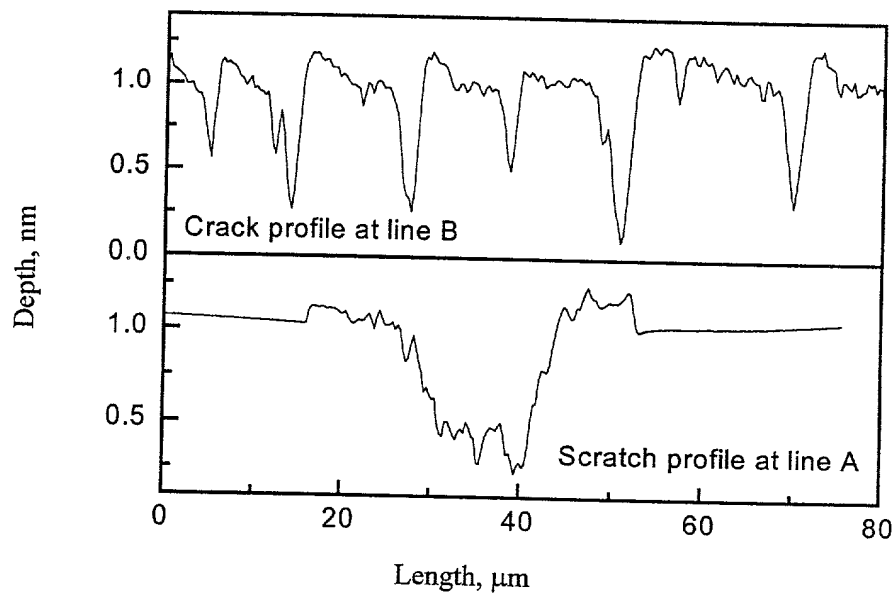
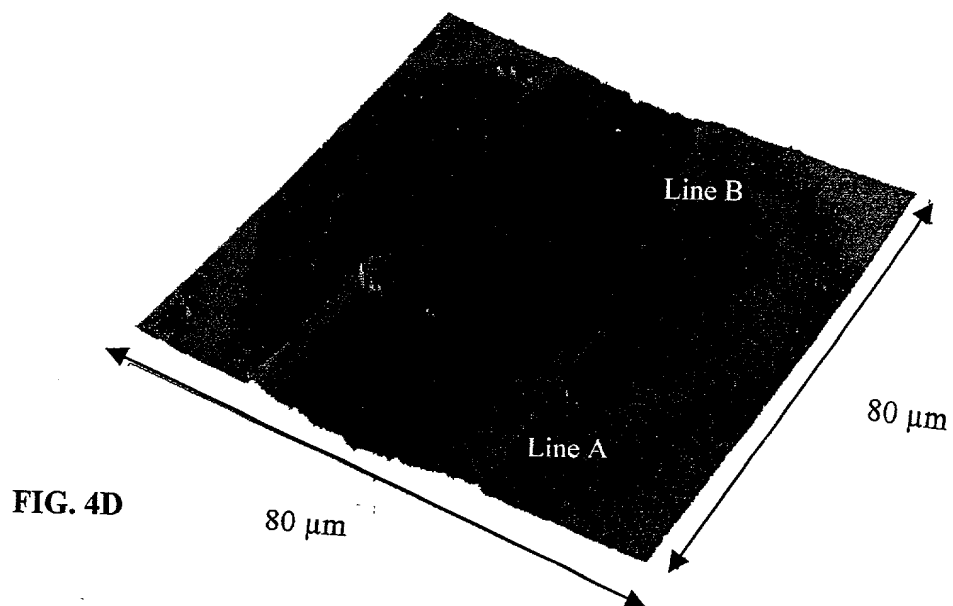
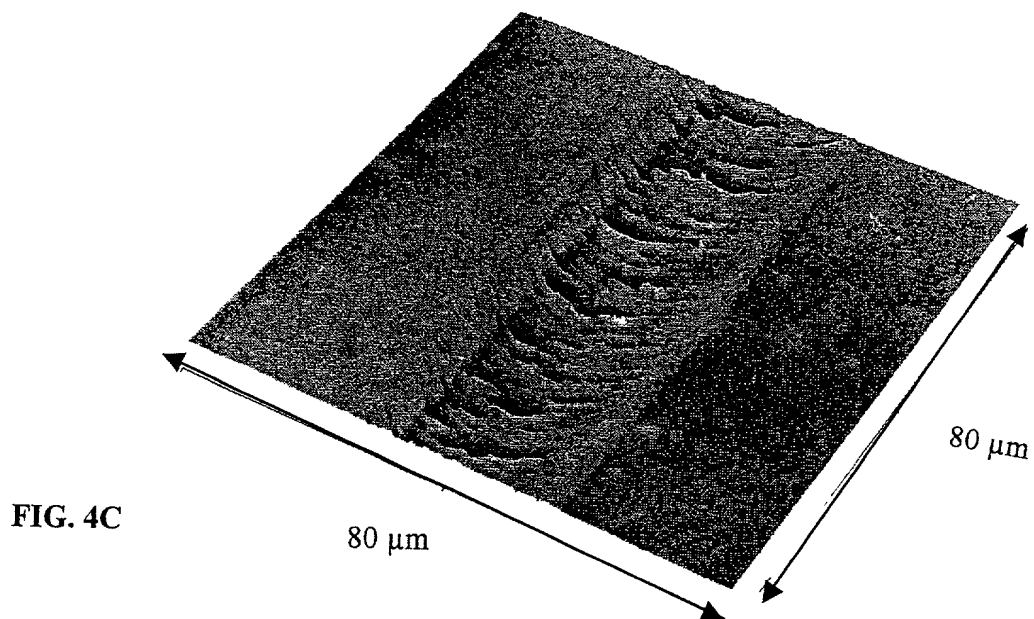


FIG. 4A



(a)

FIG. 4B



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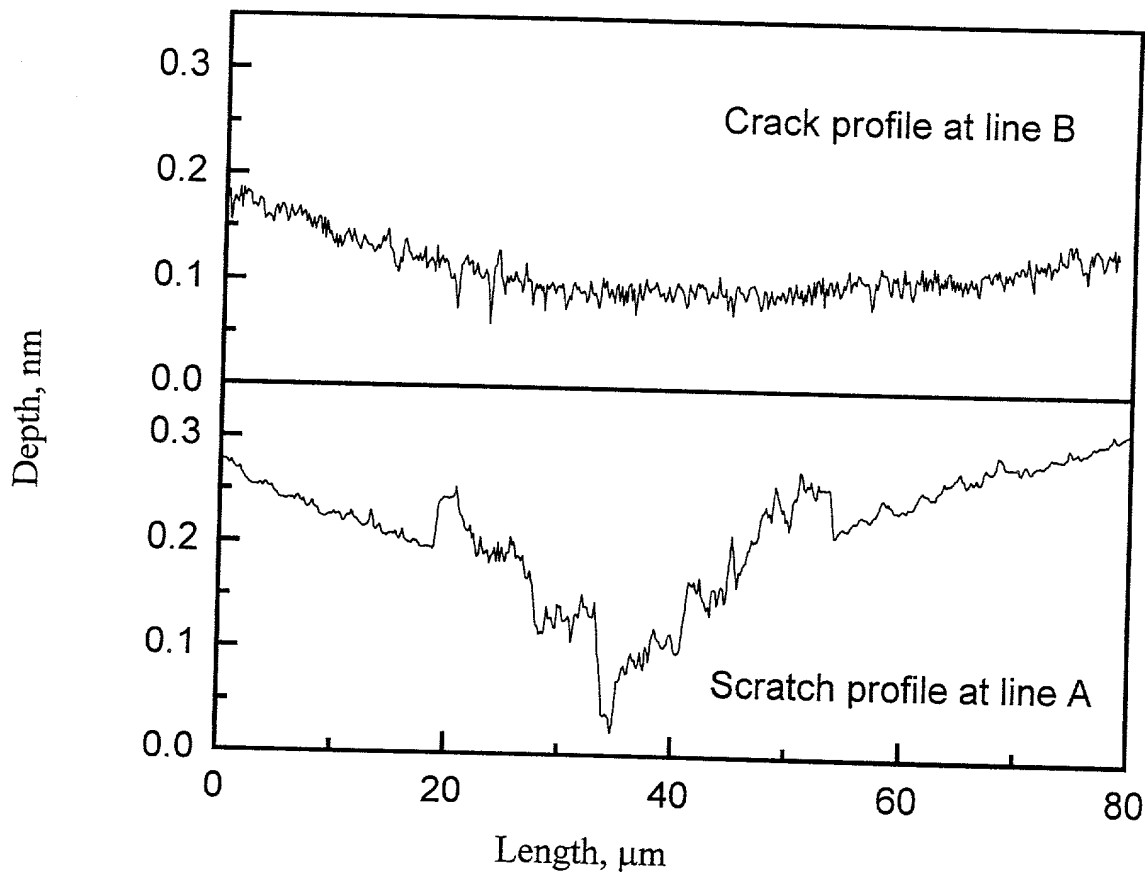


FIG. 4E

Concentration of as-received  $\text{Al}_2\text{O}_3$  in the dry gel film, wt%

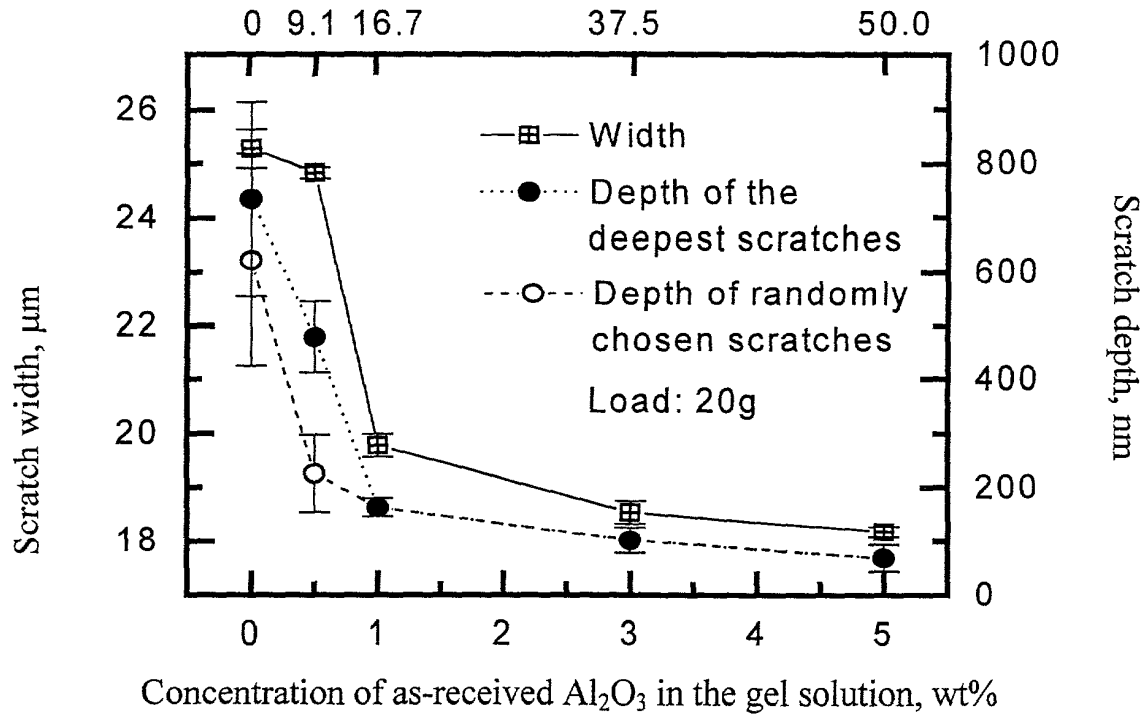


FIG. 5



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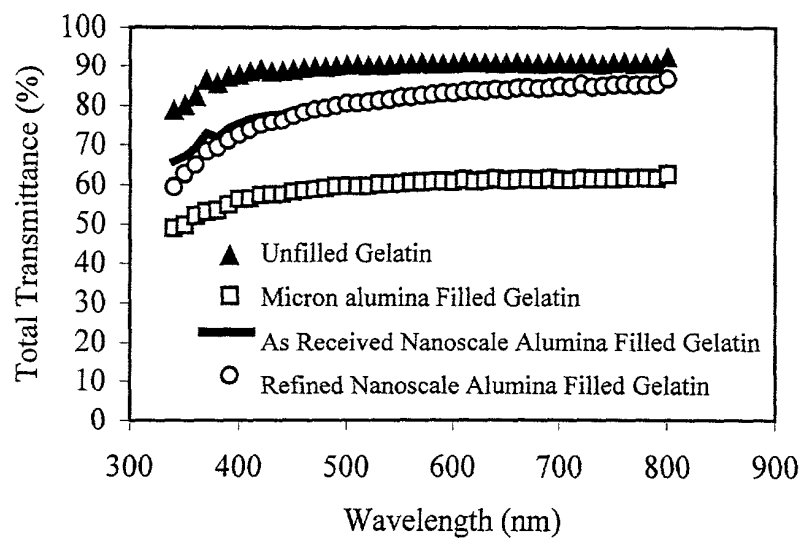


FIG. 6

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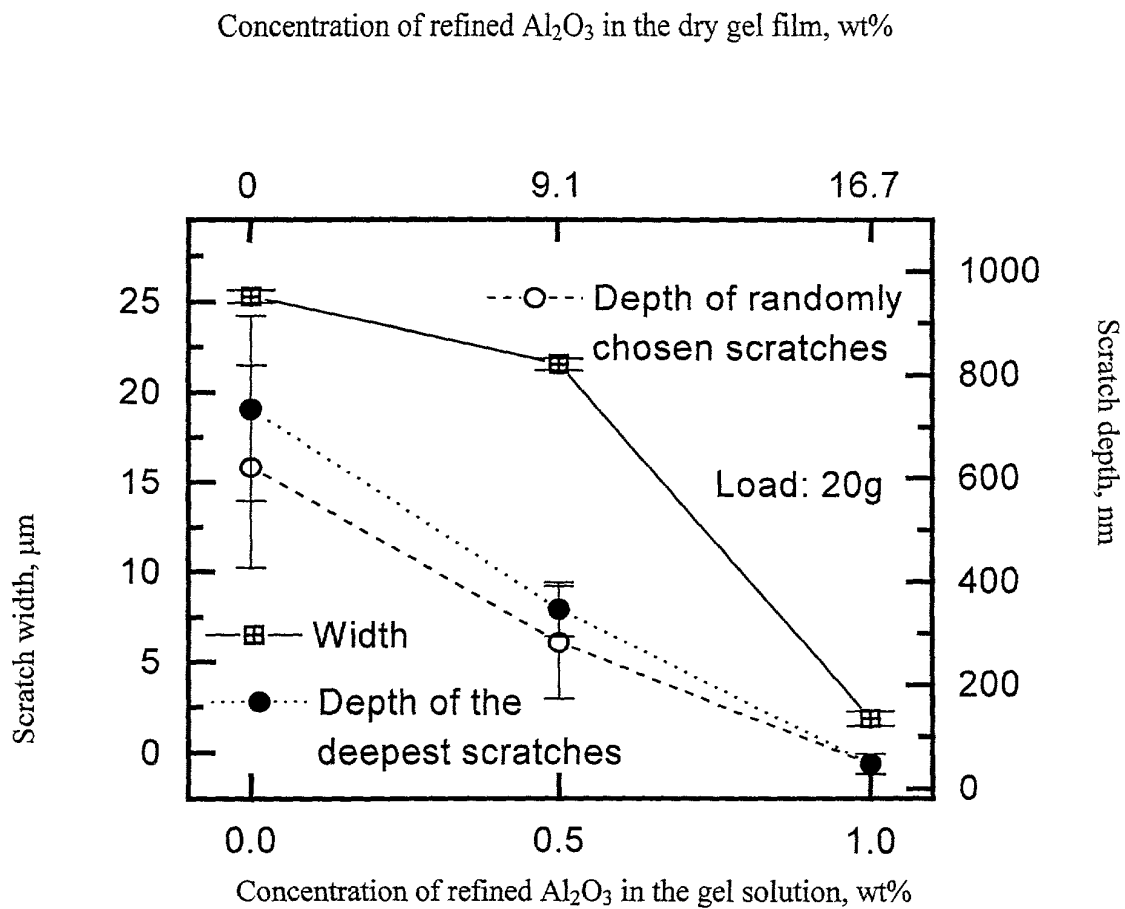
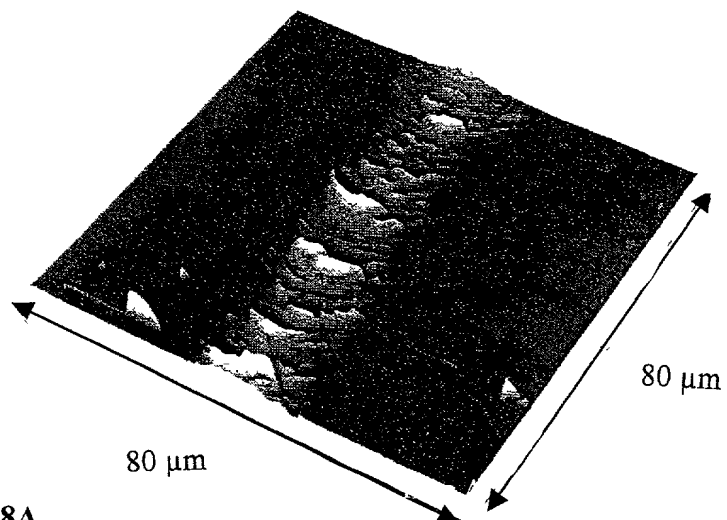
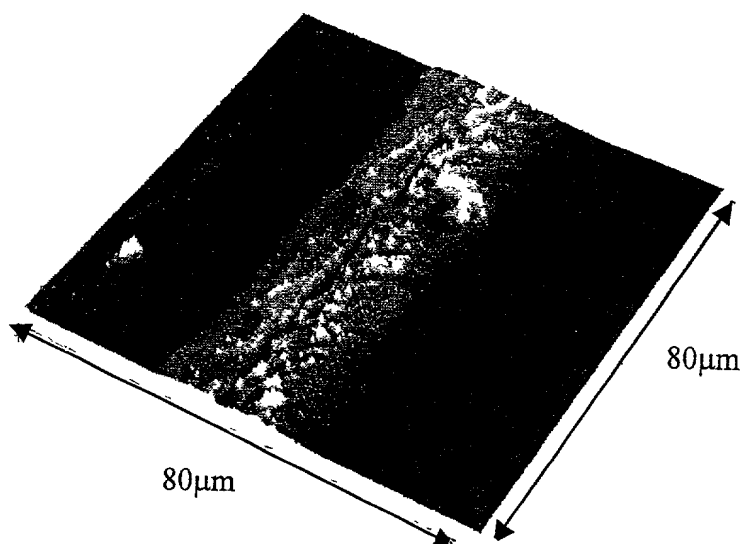


FIG. 7



**FIG. 8A**



**FIG. 8B**

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FIG. 9A

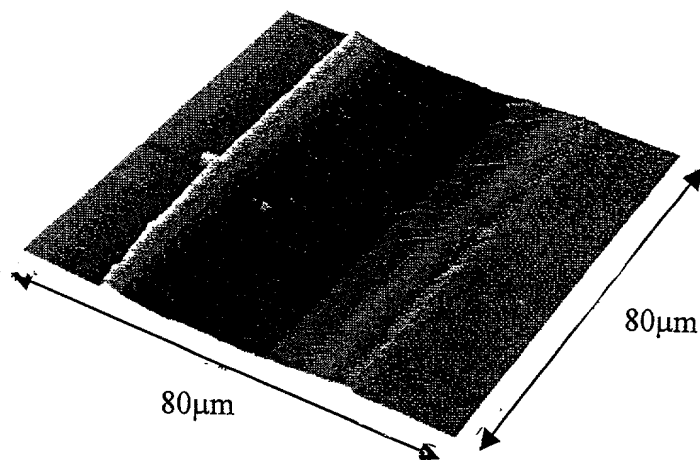
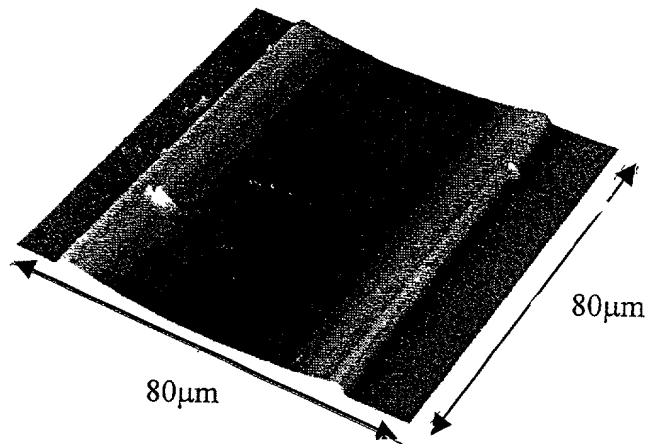
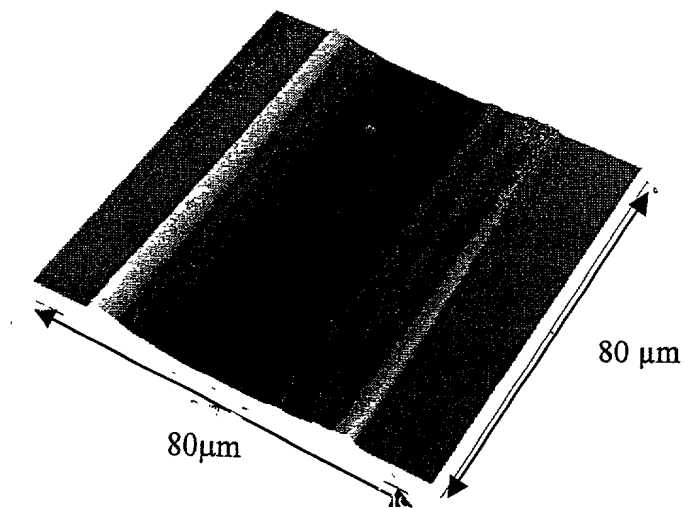


FIG. 9B

FIG. 9C



Concentration of as-received  $\text{Al}_2\text{O}_3$  in the dry gel film, wt%

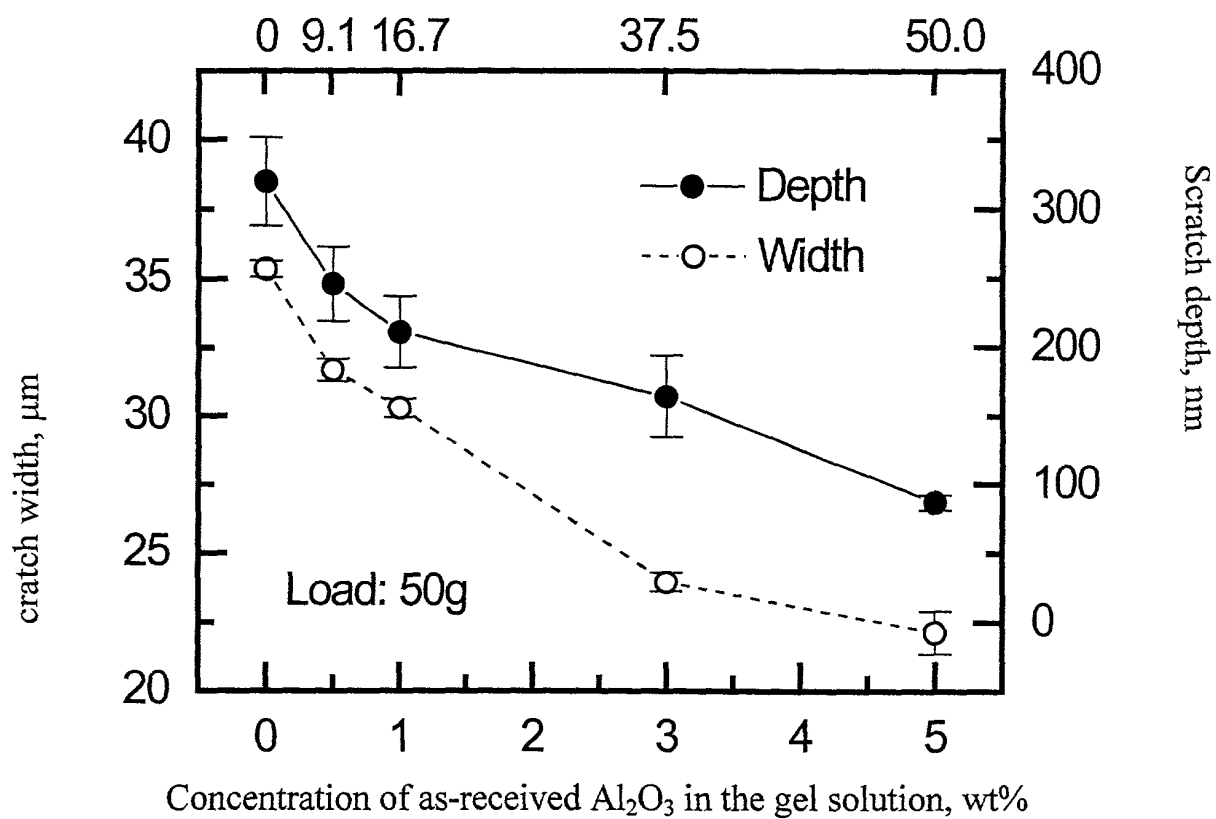


FIG. 10

Concentration of refined  $\text{Al}_2\text{O}_3$  in the dry gel film, wt%

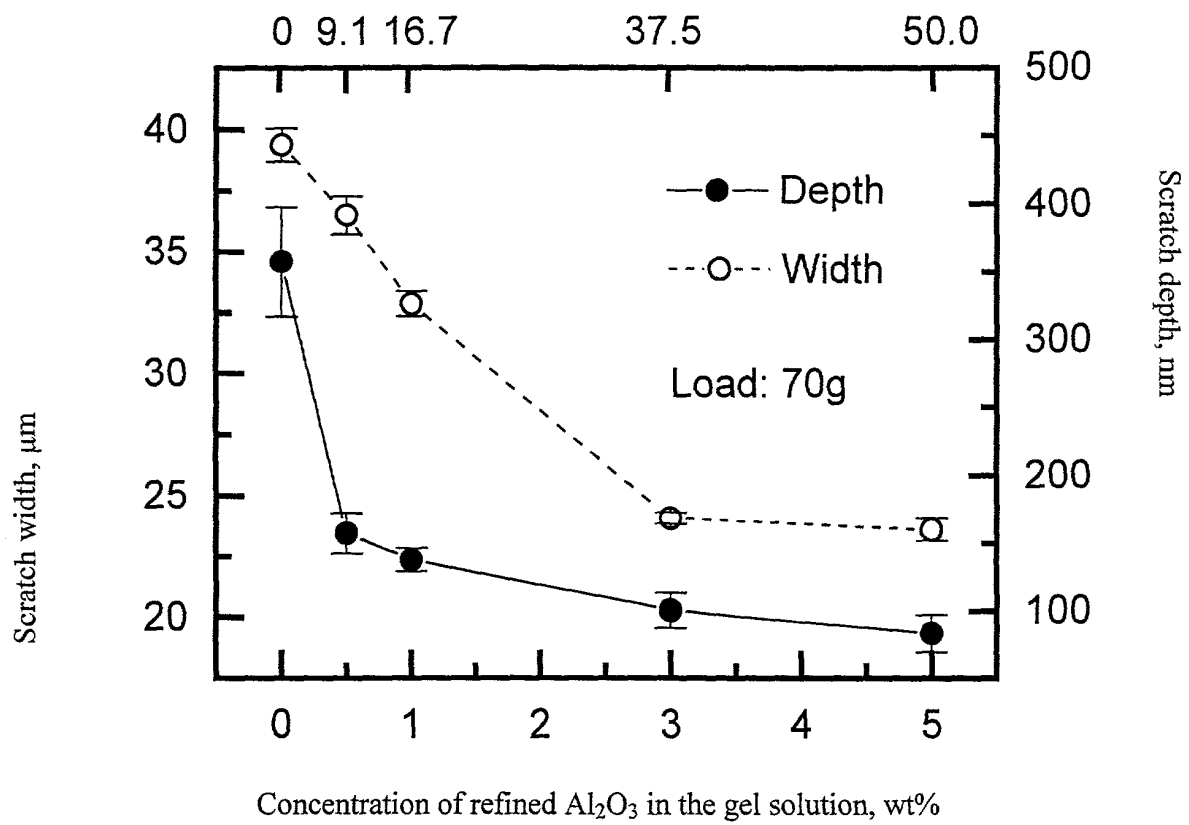


FIG. 11

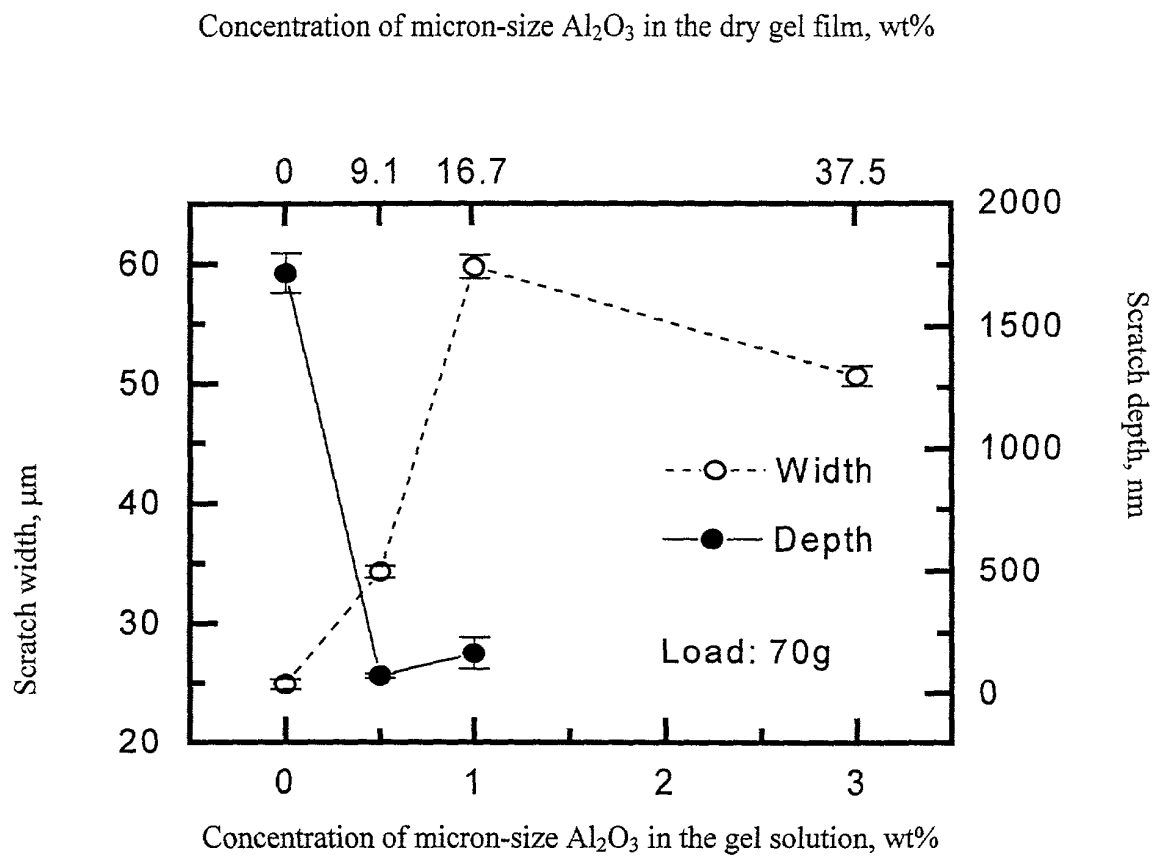


FIG. 12

FIG. 13A

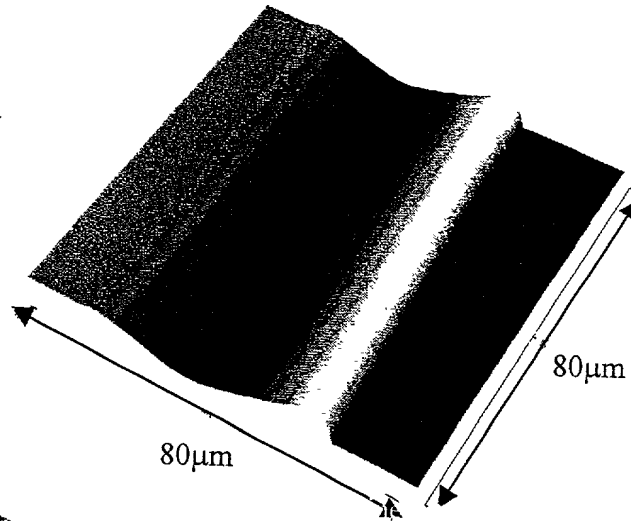


FIG. 13B

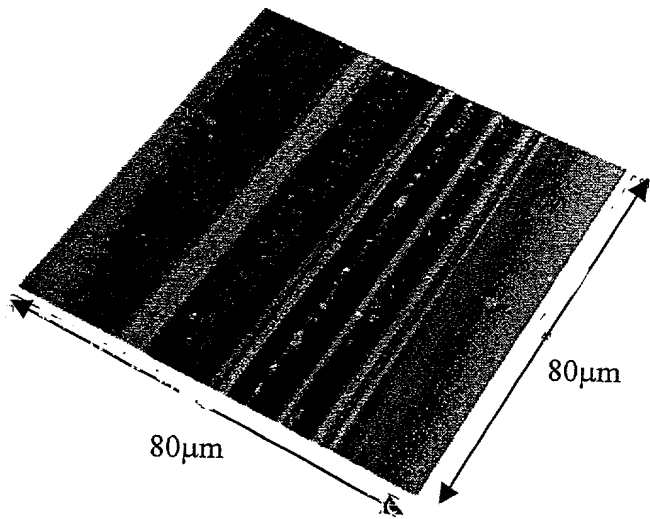


FIG. 13C

